Driving Recorder

Continuous Loop Recording

Model :**UER-03(single camera)**

UER-04(dual camera)

User Manual Version: 0.3

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- **Important User Instructions**

1. Thank you for purchasing GPS Driving Recorder!
2. “GPS Driving Recorder” is an in-car electronic device which is designed to integrate data storage and video recording while driving. It faithfully saves driving records as data and video that can trace back the original driving route, time and incidents. It provides evidence of incident scene or critical evidence to incident cause.
3. However, our company will not be responsible for failure in recording video or damage to video file. If any of the above incidents occurs, the following are possible causes:
4. The product is not turned on.
5. Flash drive is not properly installed.
6. The product has been seriously damaged.
7. Flash drive is removed during recording.
8. Proper installation procedures are not followed.
9. To assure proper use of the product and your safety, prior to using the product, please read the following description thoroughly and comply with all the instructions and be aware of the meaning of warning messages.

- **Danger**

1. The product can only be installed in a close space in vehicle.
2. Properly keep the product and its accessories in a place that children cannot reach to prevent product damage or choking hazard.
3. Please do not use power source that is not DC12V or DV24V to prevent fire or electric shock hazard.
4. Please keep the product away from fire.
5. Please make sure the product is properly installed prior to use. To prevent detachment of the product due to wire movement, please make sure all wires are properly installed.
6. A designated power cable is provided to connect to car cigarette lighter. Using unapproved power cable may cause product damage or fire hazard.

- **Warning**
    1. Disconnect power immediately if odor or smoke occurs during the use of the product.
    2. The product can be only repaired by licensed and trained technician. Please do not disassemble or repair the product.
    3. Please do not open the product case, change the equipment, replace parts and use non-original parts (including flash drive, AV cable… etc.) as this will void the warranty!
    4. The product has warranty label. If the label is damaged, the warranty will be lost!
    5. Please do not expose the product directly to sun light, high temperature, rain or humid and contamination environment.
    6. Please be careful not to spill any liquid on the product or leave the product in any liquid.
    7. Please do not use volatile solvent for cleaning.
    8. Please do not adjust the product while driving.
    9. When the product is plugged in, please do not touch the product with wet hands.
    10. If any of following situations occurs, please immediately remove the power plug and send the product back to the original retail store for repair:
        - Power cable or power plug is damaged.
        - Liquid gets inside the product.
        - The product is dropped or the product case is damaged.
        - The product cannot be started normally or fault occurs after startup.

- **Attention**

1. The best performance occurs when the product is in horizontal position. Please check the product frequently and keep it in horizontal mode.
2. The meaning of indicator lights is detailed in the manual. Please follow the instructions regarding indicator lights to operate the product.
3. If the cigarette lighter jack in your car is powered continuously even with the car engine off, always disconnect the power cable from the cigarette lighter jack before leaving your car, to avoid exhausting the car battery.
4. Please make a backup copy to save the file of important driving record.
5. Disconnect power before removing flash drive and wait until all lights are off to remove the flash drive.
6. Any serious impact may cause loss of recording.
7. If the product comes with GPS function, please be aware of the following instructions:
8. A general commercial GPS system may have average positioning error over 15 meters. It only provides rough positioning data.
9. GPS reception performance is affected by weather or environment. When GPS receiver is started, it usually takes a while to lock in satellite and transmit data.
10. The tinted windshields may affect recording image quality and GPS reception performance. It is recommended to use GPS external antenna on car top to improve signal reception.

01. Product Description

UER-03 UER-04 provides Video recording integrated with GPS features. It combines GPS and Digital Video (2-channel) functions into a system. The GPS is recording a point every one second and the camera provides VGA (640 x 480) resolution. When you use this device while you are driving a car, it provides GPS position with video recording files.

According the Customize application, the video file that you record will show the route on the Google Map as well as the live video for inside and outside of vehicle

02. Feature

1. Dual camera, Front/Back, VGA(640x480) with 300,000 pixels
2. MPEG-4 A/V encode @ VGA 30 FPS (each channel)
3. 2 USB Drives for storing video files
4. The file can be stored until the last second before electrical interruption
5. Backup battery: 10~15 seconds record for dual camera
6. miniUSB port for setup function & video download
7. G-Sensor (0.1~4.0G) & Voice record function
8. Alarm: under 10% memory space & no USB device inserted
9. Video OUT : NTSC / PAL
10. System boot up: Under 45 seconds
11. Record button (Can be set by configuration)
12. Multiple selection of recording camera (Can be set by configuration)
13. Resolution (640x480 VGA / 320x240 QVGA) & Frame Rate setup (1~30/sec)
14. Events Secured (Prevent the overwrite problem and must be released by application)
15. Password for securing setup function
16. Can display two video files, map, GPS, G-sensor and personal information at same time on application
17. Backup, Format, and Print function
18. Video recording with time-seamless
19. IR LED for the environment of low illumination

03. Hardware Specification

CMOS Sensor Module specification

Items	Spec
Array Element	640x480 (VGA)
Sensor Size	1/4”
View Angle	Front camera: 90; back camera: 120
Image Transfer Rate(Max)	VGA —30 fps ·
Scan Mode	Progressive
Electronic Exposure	Up to 510:1 (for selected fps)
Pixel Size	6 µm x 6 µm
Fixed Pattern Noise	<0.03% of VPEAK-TO-PEAK
Image Area	3.984 mm×2.952 mm

GPS specification

Category	Parameter	Description
General	GPS Chipset	SiRF Star III
	Frequency	L1, 1575.42MHz
	Channels	12 CH for tracking
	Antenna	GPS Patch Antenna
	Datum	WGS-84
Acquisition	Cold Start	50 sec , typical*
	Warm Start	33 sec , typical*
	Hot Start	1 sec , average
	Reacquisition	< 1 sec
Protocol	GPS output	NMEA-0183 (V3.01) GGA , GSA , GSV , RMC (default)
		GLL, VTG (Optional).
Sensitivity	-158dBm	

* It is measured under open sky accordingly.

Power Source

Power Source	DC
voltage	5.0 volt

Power Consumption

System power consumption is 3A @ 5volt

04. Product Overview

01	Video Out	**07**	Back camera for Inside view of the car	**13**	Hole for Stand
02	MiniUSB (PC Connection)	**08**	Illumination (Night View)	**14**	Front Camera for outside view of the car
03	Screw	**09**	Light Sensor	**15**	Manual record button
04	Cap for the glare	**10**	GPS Indicator	**16**	Buzzer
05	DC Jack (5V/2A)	**11**	Record Indicator	**17**	USB port cover
06	The jack for External Antenna	**12**	Microphone		

Dual Camera

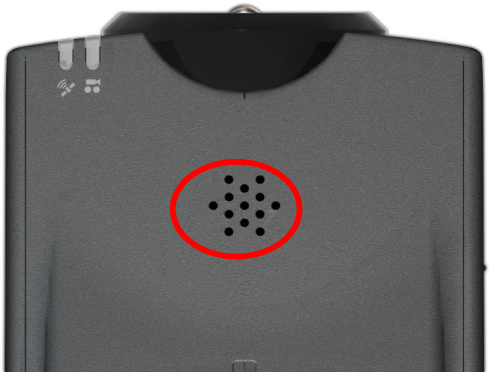
Single Camera

USB Port of CONFIG

1. Used for Configuration setting and firmware updated.
2. The four golden fingers of MicroPD need to face on the word, CONFIG, for connection.

GPS & Record Indicator

1. GPS: Green/get single, Red/no single
2. Record: Blue/recording



Microphone

Record the sound or voice.

Cap

Cap for reducing the glare.

Video Out & miniUSB

1. Video Out

Connect with monitor for live view.

2. miniUSB

Connect with PC for file review.

Record button & Buzzer

1. Record button

Must setup the configuration to turn on the function of manual record.

2. Buzzer

System, event, low memory alarm.

05. Device Setup

1. Counterclockwise rotate the screw to open the bottom cover.

2. Plug the flash drive into any slot (golden finger face the device).

Note: if you want to setup the device, you need to plug the flash drive into the slot which has the mark of “CONFIG”.

3. Clockwise rotate the screw to close the bottom cover.

4. Attach the mounting frame to the main device by following direction.

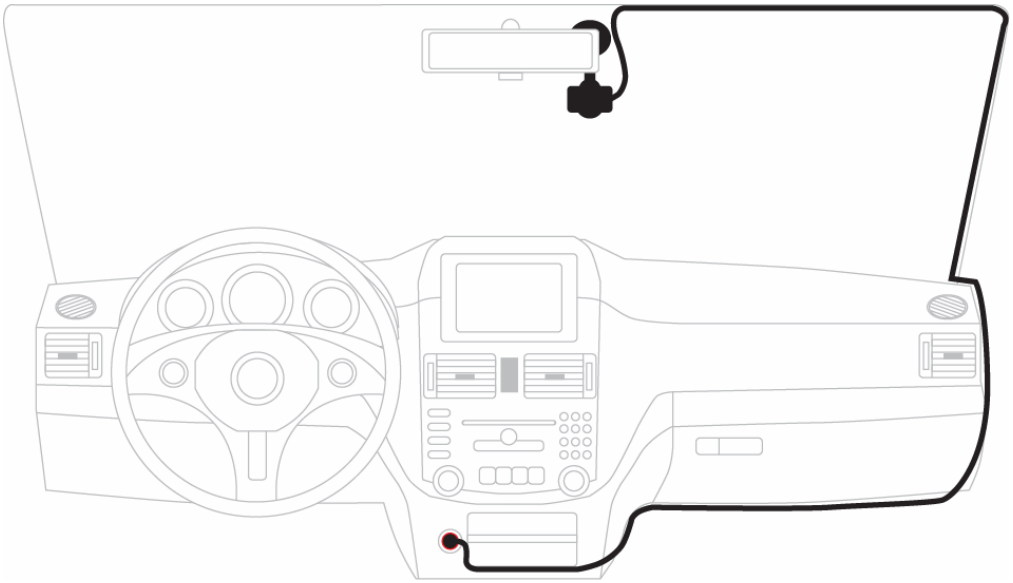
5. Place the suction cup and mounting frame on the windshield glass and push the locking lever down to firm the mounting frame.

6. Turn the spinning axle of mounting frame to adjust the angle of the product. The product needs to be paralleled with the road.

7. Connect the power cable with the product by plugging the DC port.

8. Start the car engine and connect the power cable to the car cigarette lighter. After the buzzer has three beeps and GPS and record indicator light up, the system will start recording.

9. Use the wire clamp to firm the cable for avoiding the danger when driving



Note: To get the best recording vision, we suggest to attach the product at the location as close to the rearview mirror as possible.

Please do not replace or remove the flash drive when the device is operating.

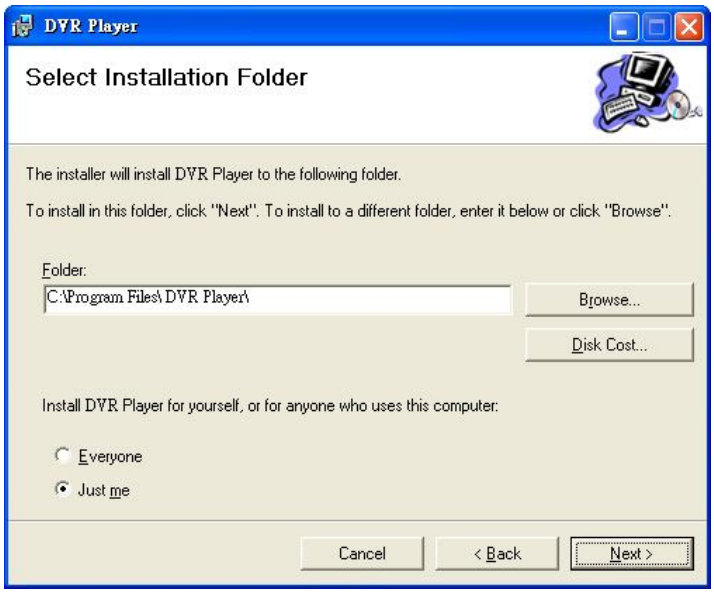
06. Application

6.01. Setup

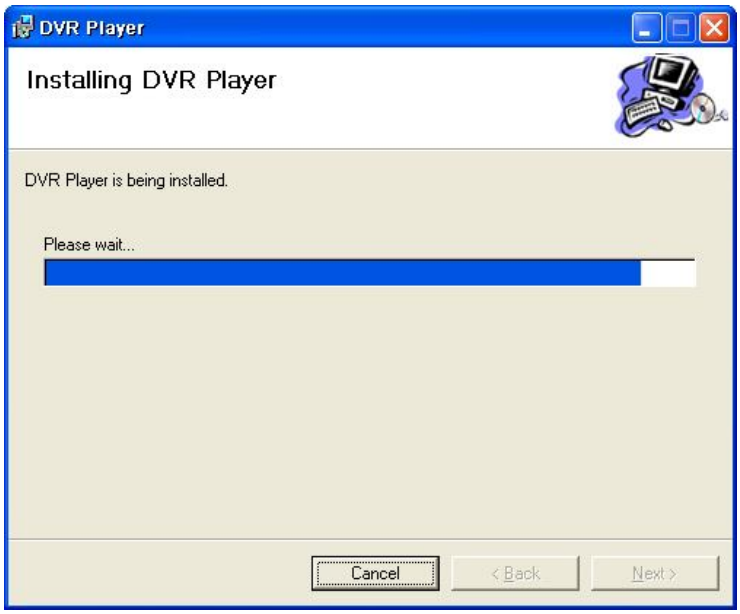
1. When insert the CD-ROM in your computer. The system will automatically run the setup of application. Or, you can double click “Setup.exe” in the CD-ROM to run the application.
2. Click “Next” to go to next step.

DVR Player
Welcome to the DVR Player Setup Wizard
The installer will guide you through the steps required to install DVR Player on your computer.
WARNING: This computer program is protected by copyright law and international treaties. Unauthorized duplication or distribution of this program, or any portion of it, may result in severe civil or criminal penalties, and will be prosecuted to the maximum extent possible under the law.
Cancel
< Back
Next >

3. Select the path that you want to install the application. And then, click “Next” to go to next step.


DVR Player
Select Installation Folder
The installer will install DVR Player to the following folder.
To install in this folder, click "Next". To install to a different folder, enter it below or click "Browse".
Folder:
C:\Program Files\ DVR Player\
Browse...
Disk Cost...
Install DVR Player for yourself, or for anyone who uses this computer:
Everyone
Just me
Cancel
< Back
Next >

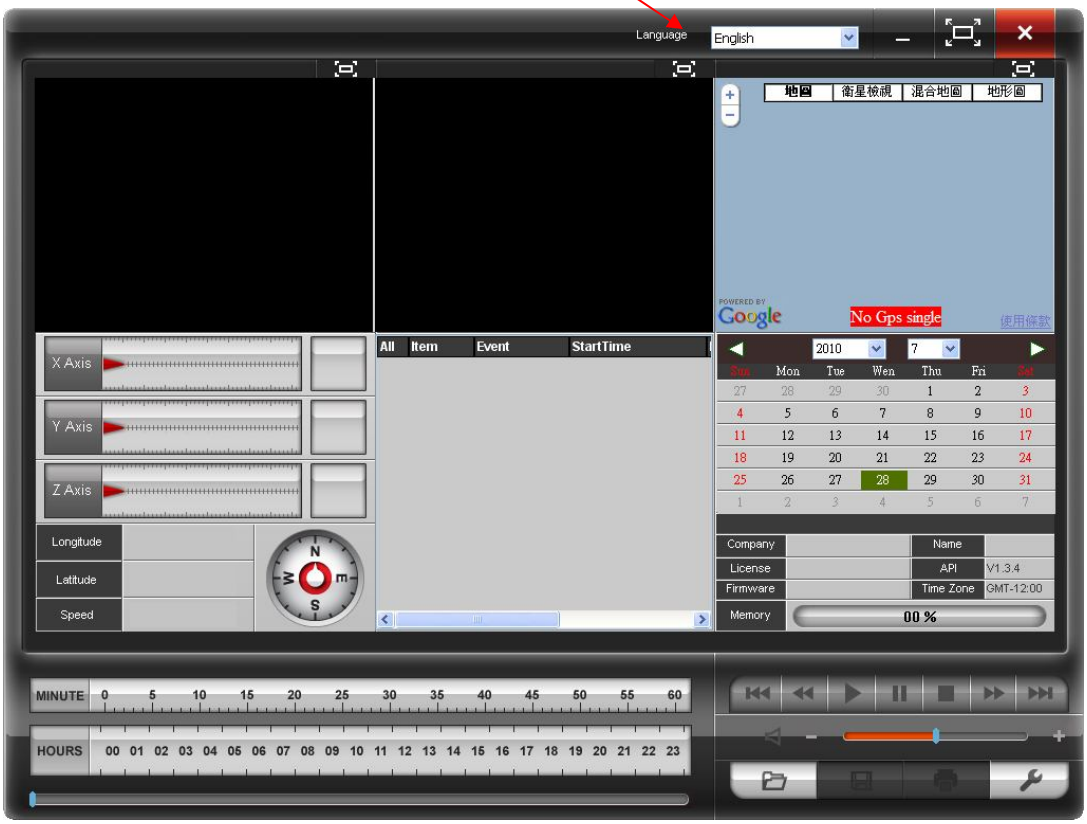
4. The system will start installing the application.



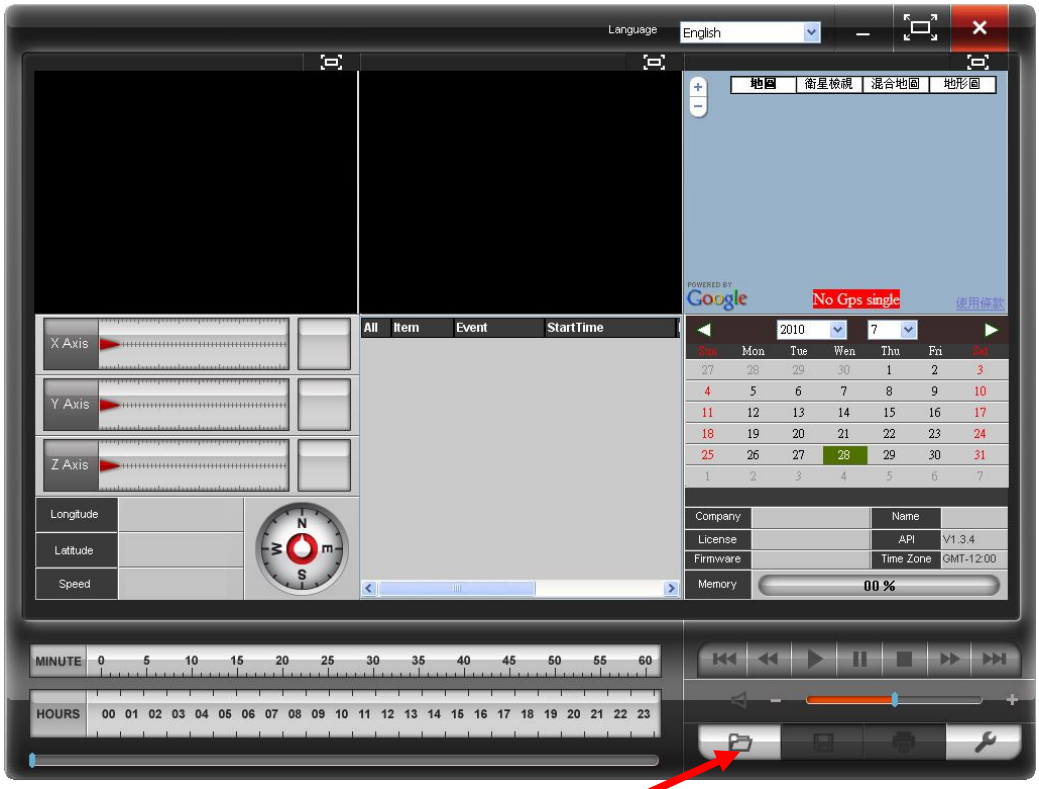
5. After the complete the setup, you will see an icon called “DVR Player”. Double click the icon to run the application.

6.02. Language Selection

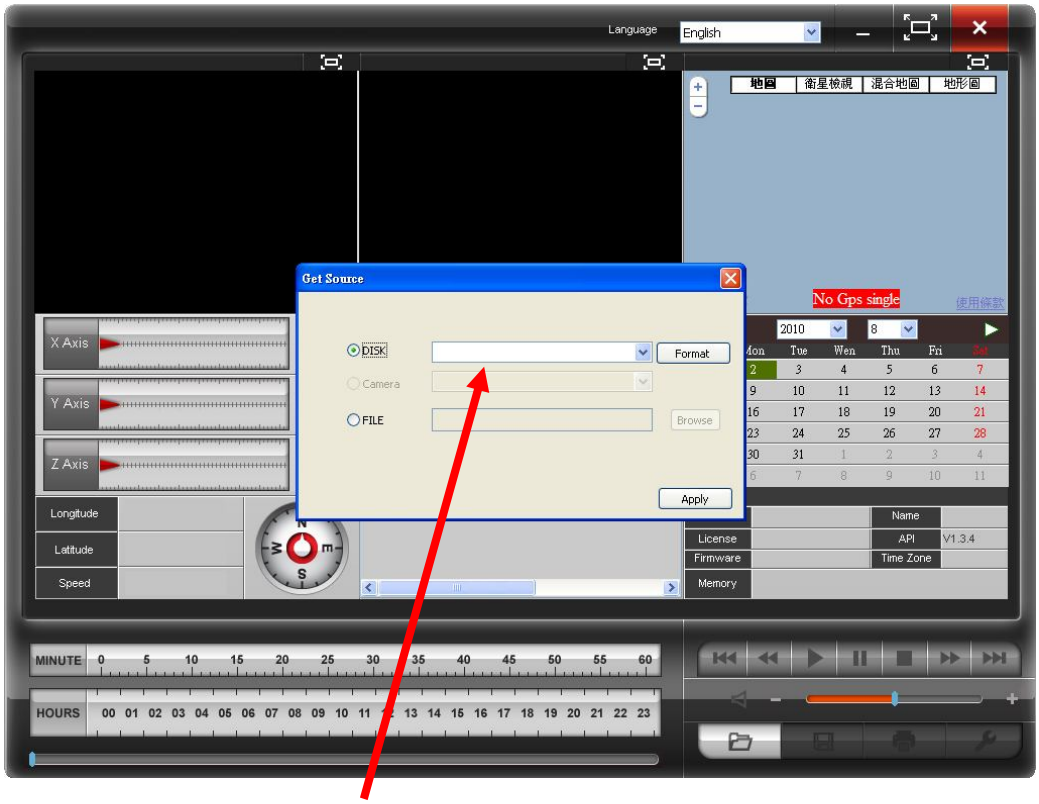
Select your language for application used.



6.03. Open File



Click the button to open the file

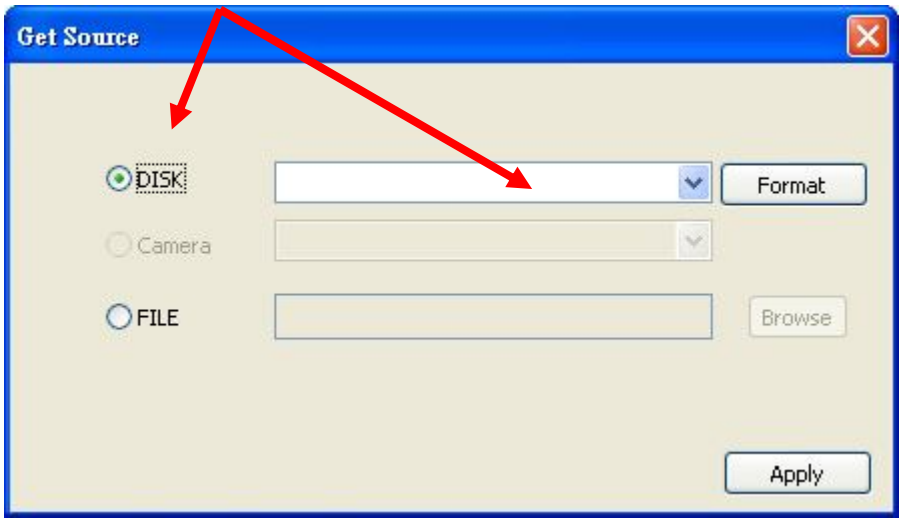


Select the path of the file

DISK	To read the file from MicroPD, you must plug it in your computer
Camera	To read the file from device, you must connect it with your computer
FILE	To read the file from hard drive, you must copy the file to your computer

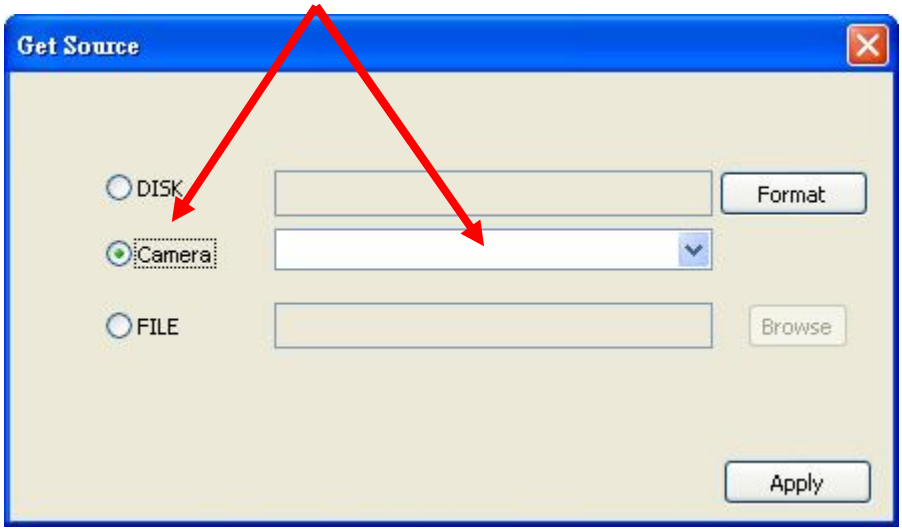
6.03.01. Open File by “DISK”

1. Make sure MicroPD is connected with PC.
2. Select the Capital that represents your MicroPD. Then, press “Apply”.



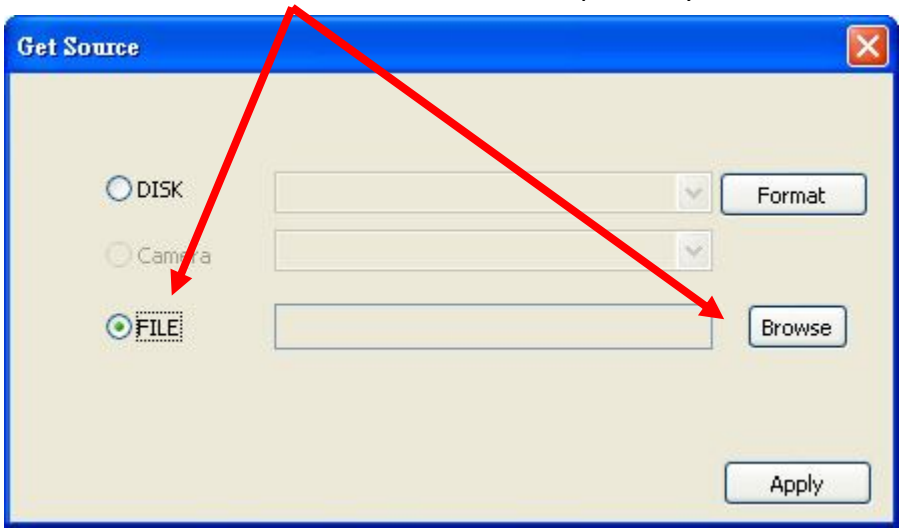
6.03.02. Open File by “Camera”

1. Make sure DVT is connected with PC by miniUSB.
2. Select the Capital that represents your DVR. Then, press “Apply”.

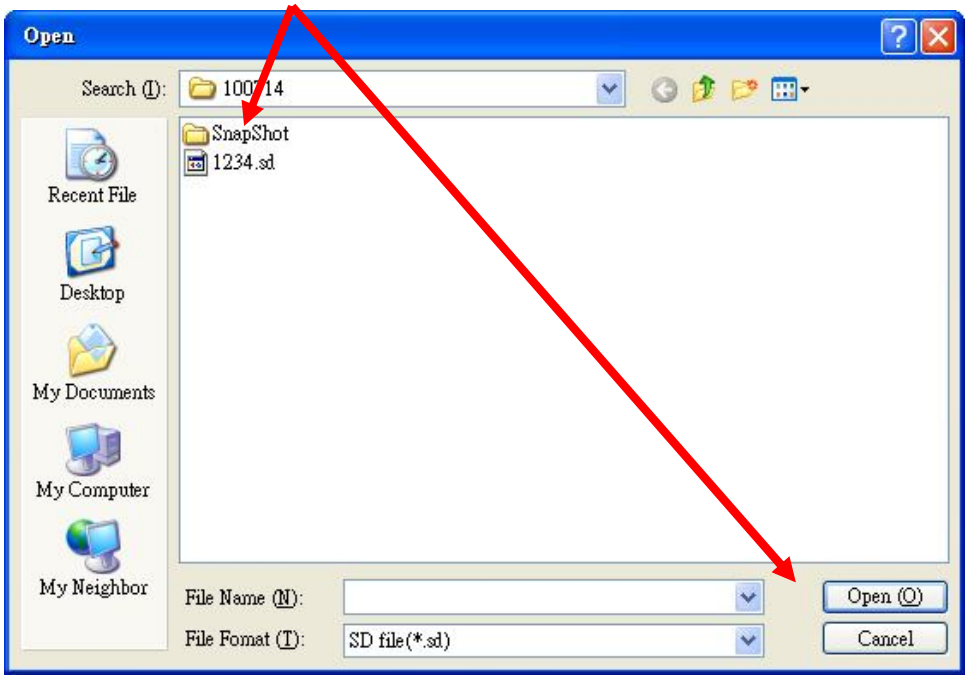


6.03.03. Open File by “FILE”

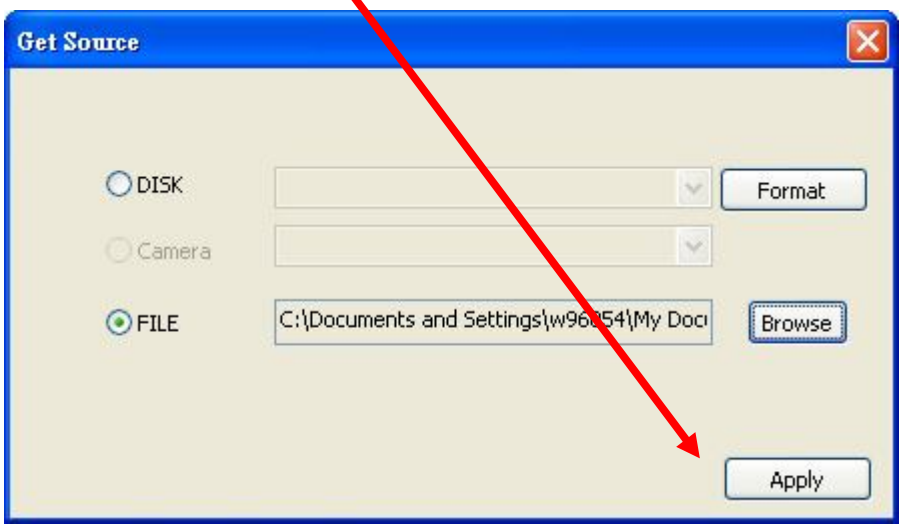
1. Click “Browse” to find the backup file in your PC.



2. Select the backup file in your PC. Then, Press “Open”.



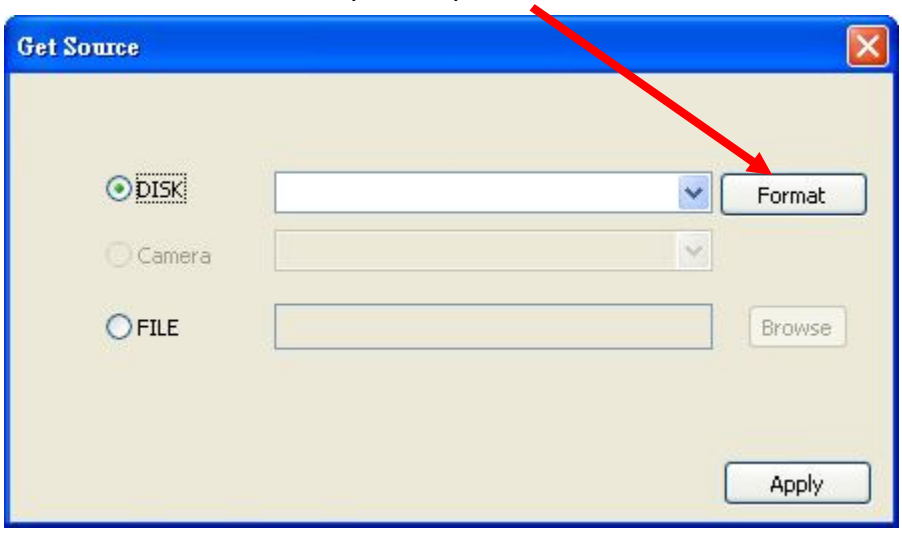
3. Click “Apply”



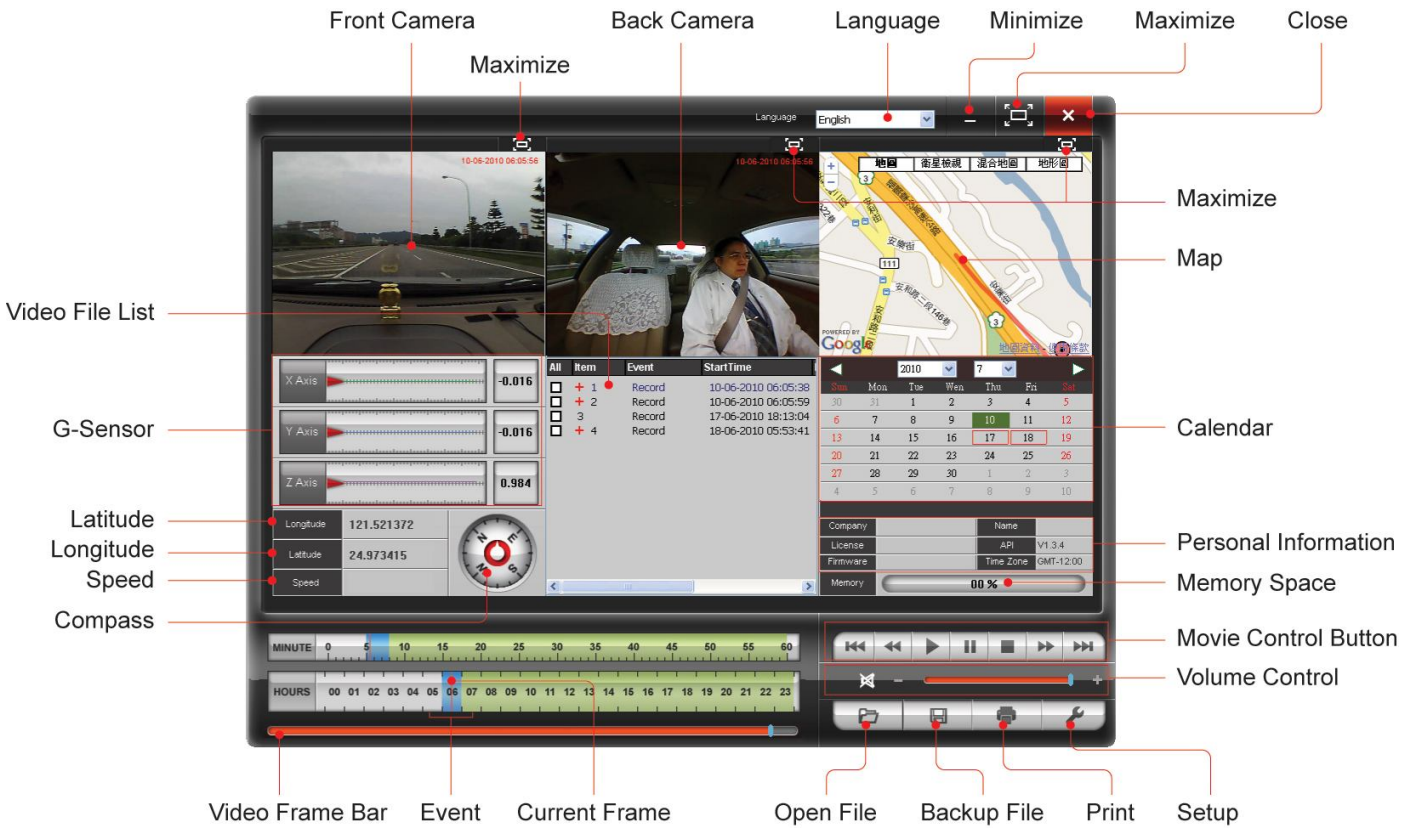
6.03.04. File format

If you want to use new MicroPD for recording file, you must plug it in your computer and press the button to format it.

Note: For security issue, you must use this button to format the MicroPD.



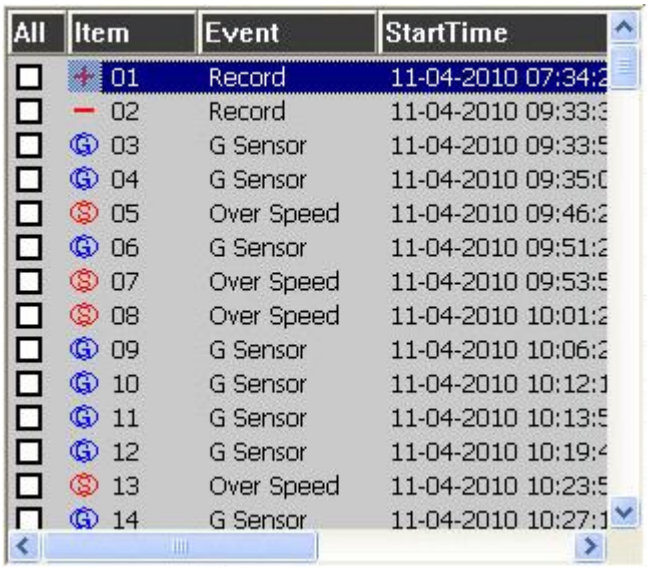
Main Page Function



6.04. Event Selection

The event list is based on the system power. When user turns on the power, the system will automatically create a new section of video file as the list The list also shows what kind of event it is. (e.g. "**over speed**", "**G sensor**")

1. Click "**+**" to extrude the tree of event list
2. Click "**–**" to shrink the tree of event list
3. Mark "G" represent G Sensor event
4. Mark "S" represent Over Speed event



6.05. Calendar

1. When user opens the video file as page 9, the calendar will automatically show the date of video file. (Red square represents the recording date, Green square represents the current playing file.)
2. User can directly click the date on the calendar to playback the video if there is the event on it.

6.06. Video

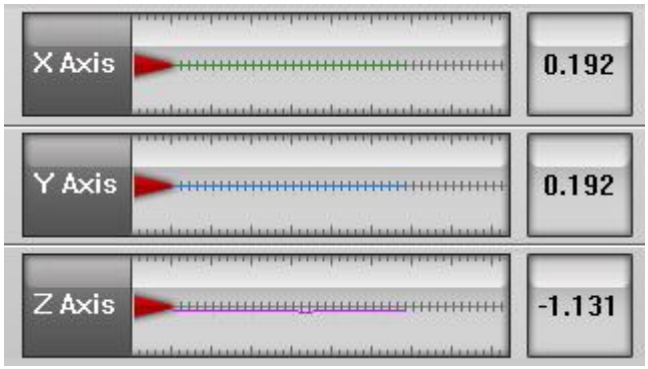
1. When user selects the section of the video file as step 2, the top two frames will show the video of front and back scene with the date on the top-right corner.
2. Click the icon on top-right corner or double click the video for full screen function.

6.07. Map

1. When user select the section of the video file as step 2, the top-right frame will show the location information on the map.
2. Click the icon on the top-right corner for full screen function.

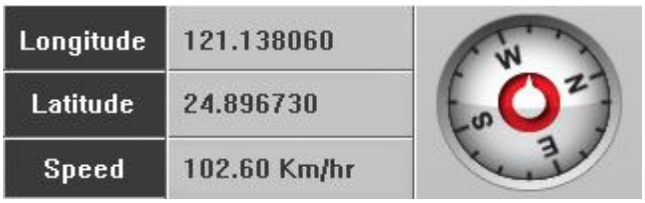
6.08. G Sensor

1. The G Sensor will show the value of acceleration of X, Y, and Z axis when user select the section of the video file as step.
2. The information is to review the crash of the direction when car accident.

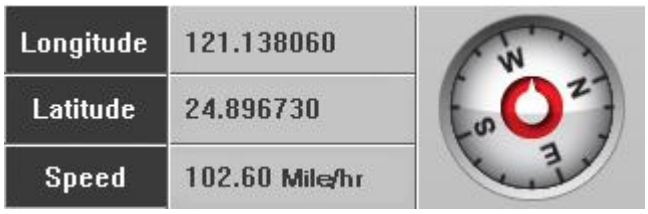


6.09. Speed / Location / Direction

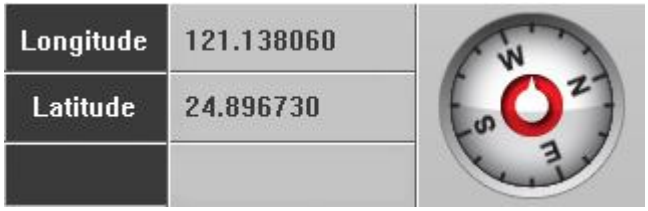
1. Shows the information of speed, longitude, latitude, and direction.



2. Click the Red area for changing the unit.

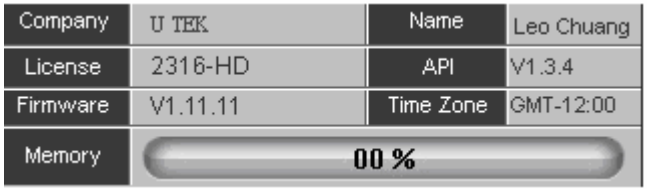


3. Click “Speed” area to show and hide speed information.



6.10. Personal Information

Shows the company name, driver name, car license, version of application, version of firmware, current time zone, and memory space of “Event”.



6.11. Video Navigation

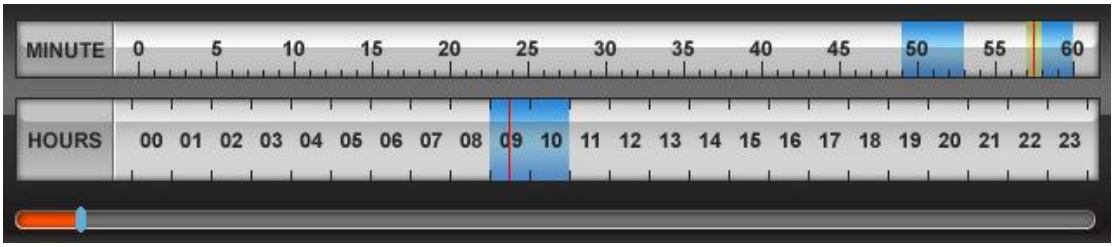
1 2 3 4 5 6 7

1	Go to previous section of video file
2	Reverse the video frame(0.5~0.0625multiple)
3	Play the video frame
4	Pause the video frame
5	Stop the video and go to the first frame
6	Fast forward the video frame(2~32multiple)
7	Go to next section of video file

6.12. Volume Control

1. Video volume can be changed by using this function.
2. Click the icon of the speaker to mute the volume of video.

6.13. Timeline



The green and blue blocks are the recording area with time of hour and minute. User can click the timeline to go to different events.

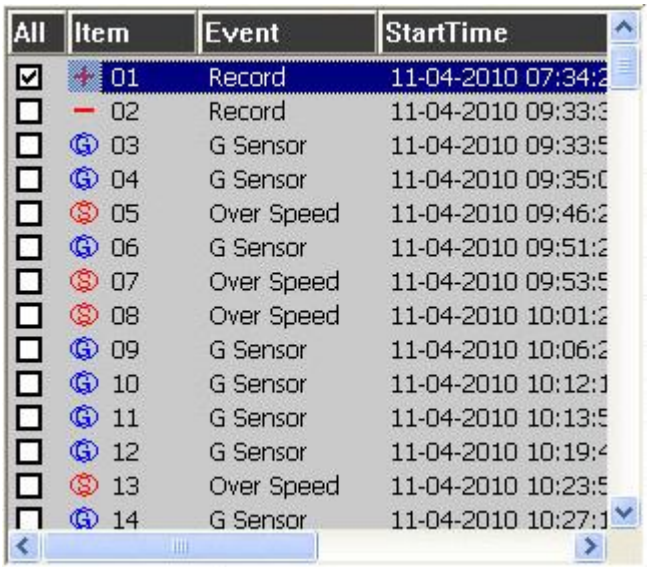
Green Block	Normal situation
Blue Block	Over speed or G sensor event

6.14. Function Button

1	Open File (Page 19)
2	Backup File (Page 30)
3	Print File (Page 31)
4	Configuration (Page 34)

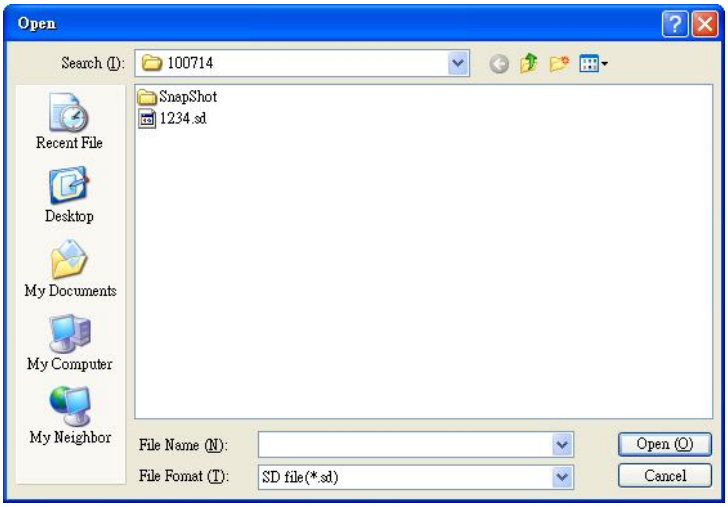
6.15. Backup File

1. Select the file that you want to backup. Or, Click “All” to select all files for backup.



2. Click the Backup button to select the place that you want to store the video file.

3. Enter the file name. Then, press “Open” to save the file.



6.16. Print File

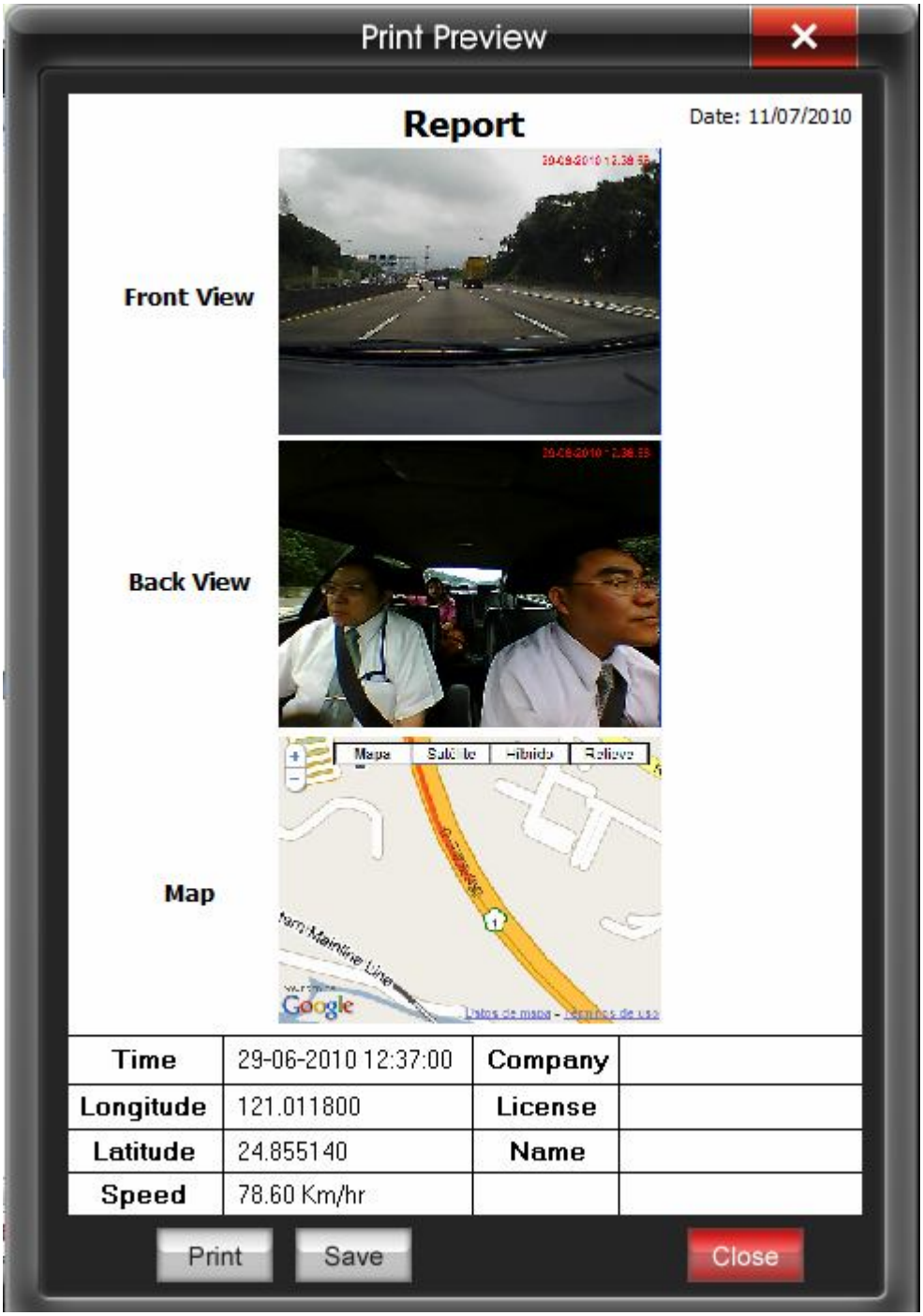
1. Click “Pause” when playing the video.

2. Use these two buttons to adjust the frame that you want to print out.

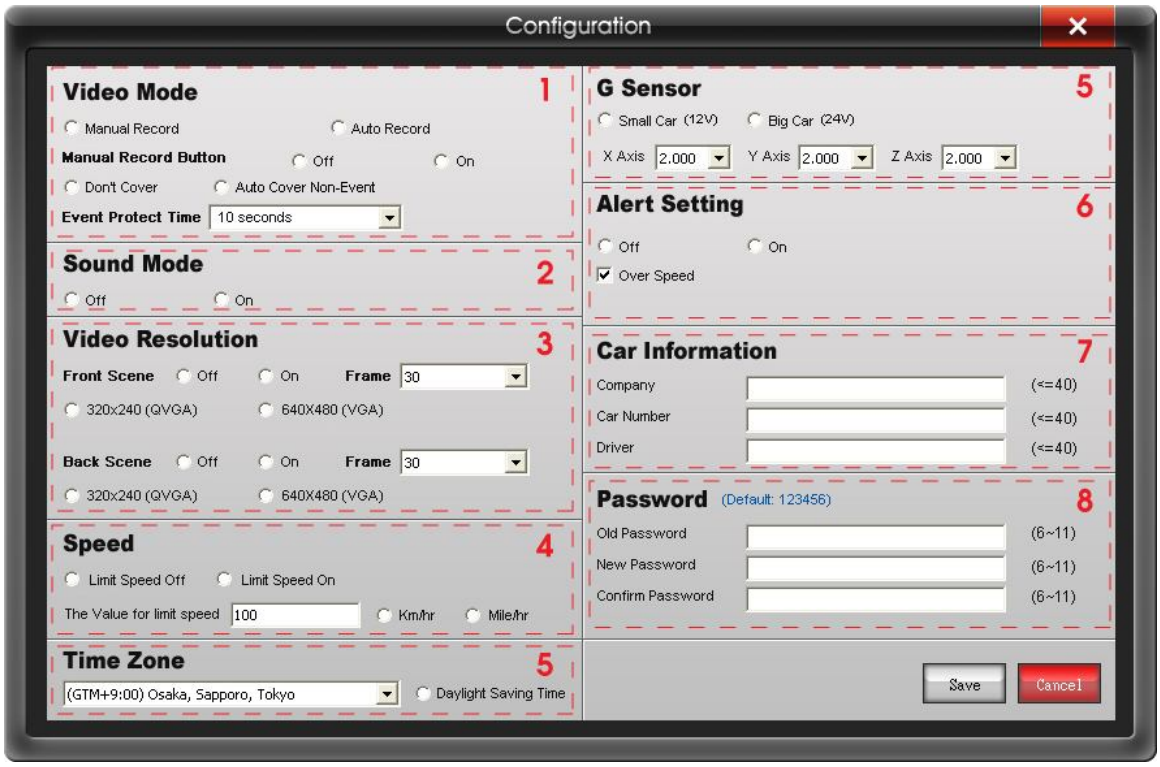
3. Click **Print button** on the main page as above image.

4. Select the item you want to print.

5. Click the **Print Preview** to show the format of the report.
6. Click the Print button to print it out.
7. Or, you can click the Save button to backup the report.



6.17. Configuration



6.17.01. Video Mode

Manual Record	You need to press the button on the device when you want to record
Auto Record	The device would automatically record the video when you power on the device
Manual Record Button	Off: The button on the device cannot be pressed On: The button on the device can be pressed for manual record
Don't Cover	Do not over write the recording file
Auto Cover Non-Event	Automatically over write the recording file which is not the event when the memory is full
Event Protect Time	To protect the event that you don't want the device to over write it

6.17.02. Sound Mode

Off	Do not record the sound
On	Record the sound

6.17.03. Video Resolution

Front Scene	On: Turn on the record function for outside view Off: Turn off the record function for outside view
Back Scene	On: Turn on the record function for inside view Off: Turn off the record function for inside view
320x240 (QVGA)	Small size of recording file
640x480 (VGA)	Maximum size of recoding file
Frame	Setup the frame per second

6.17.04. Speed

Limit Speed Off	Turn off the alarm of speed limit
Limit Speed On	Turn on the alarm of speed limit
The Value for Limit Speed	Set the speed value of speed limit
KM/hr	The speed unit of metric system
Mile/hr	The speed unit of imperial system

6.17.05. Time Zone

Change the time zone information to show the correct time when you are in the different country or time zones.

6.17.06. G Sensor

Small Car	Default value of G sensor for small car
Big Car	Default value of G sensor for Big car
X Axis	Manually setup the value of X axis of G sensor
Y Axis	Manually setup the value of Y axis of G sensor
Z Axis	Manually setup the value of Z axis of G sensor

6.17.07. Alert Setting

Over Speed	Turn on the alarm when over speed
G Sensor	Turn on the alarm when G sensor event

6.17.08. Car Information

Company	Enter the name of the company
Car Number	Enter the car number
Driver	Enter the name of the driver

6.17.09. Password

The function of Password is to secure the setup items that only administrator can change the value of System Setup.

The default password is 123456

Old Password	Enter old password
New Password	Enter new password
Confirm Password	Re-enter new password

07. Content List

1. **DVR x1**
2. **Power Cable x1**
3. **Mounting Frame x1**
4. **Flash Drive x1**
5. **Video Cable x1**
6. **Wire Clamp Packet x1**
7. **User Manual x1**
8. **CD-ROM x1**
9. **Warranty Card x1**

08. Appendix

8.01. Greenwich Mean Time

Time Zone	Place
(GTM+2:00)	Athens, Bucharest, Istanbul
(GTM+2:00)	Windhoek
(GTM+2:00)	Helsinkj, Kyiv, Riga, Sofia, Tallinn, Vilnius
(GTM+3:00)	Baghdad
(GTM+3:00)	Nairobi
(GTM+3:00)	Kuwait, Riyadh
(GTM+3:00)	Moscow, St. Petersburg, Volgograd
(GTM+3:30)	Tehran
(GTM+4:00)	Baku
(GTM+4:00)	Abu Dhabi, Muscat
(GTM+4:00)	Caucasus Standard Time
(GTM+4:00)	Tbilisi
(GTM+4:00)	Yerevan
(GTM+4:00)	Port Louis
(GTM+4:30)	Kabul
(GTM+5:00)	Ekaterinburg
(GTM+5:00)	Islamabad, Karachi
(GTM+5:00)	Tashkent
(GTM+5:30)	Chennai, Kolkata, Mumbai, New Delhi
(GTM+5:30)	Sri Jayawardenepura
(GTM+5:45)	Kathmandu
(GTM+6:00)	Astana
(GTM+6:00)	Novosibirsk
(GTM+6:00)	Dhaka
(GTM+6:30)	Yangon (Rangoon)
(GTM+7:00)	Krasnoyarsk
(GTM+7:00)	Bangkok, Hanoi, Jakarta
(GTM+8:00)	Beijing, Chongqing, Hong Kong, Urumqi
(GTM+8:00)	Taipei
(GTM+8:00)	Irkutsk
(GTM+8:00)	Kuala Lumpur, Singapore
(GTM+8:00)	Perth
(GTM+8:00)	Ulaanbaatar
(GTM+9:00)	Osaka, Sapporo, Tokyo
(GTM+9:00)	YaKutsk
(GTM+9:00)	Seoul

(GTM+9:30) Adelaide
(GTM+9:30) Darwin
(GTM+10:00) Brisbane
(GTM+10:00) Canberra, Melbourne, Sydney
(GTM+10:00) Vladivostok
(GTM+10:00) Hobart
(GTM+10:00) Guam, Port Moresby
(GTM+11:00) Magadan, Solomon Is., New Caledonia
(GTM+12:00) Petropavlovsk-Kamchatsky
(GTM+12:00) Coordinated Universal Time+12
(GTM+12:00) Fiji
(GTM+12:00) Auckland, Wellington
(GTM+13:00) Nuku'alofa
(GTM+2:00) Cairo
(GTM+2:00) Athens, Bucharest, Istanbul
(GTM+2:00) Windhoek
(GTM+2:00) Helsinkj, Kyiv, Riga, Sofia, Tallinn, Vilnius
(GTM+3:00) Baghdad
(GTM+3:00) Nairobi
(GTM+3:00) Kuwait, Riyadh
(GTM+3:00) Moscow, St. Petersburg, Volgograd
(GTM+3:30) Tehran
(GTM+4:00) Baku
(GTM+4:00) Abu Dhabi, Muscat
(GTM+4:00) Caucasus Standard Time
(GTM+4:00) Tbilisi
(GTM+4:00) Yerevan
(GTM+4:00) Port Louis
(GTM+4:30) Kabul
(GTM+5:00) Ekaterinburg
(GTM+5:00) Islamabad, Karachi
(GTM+5:00) Tashkent
(GTM+5:30) Chennai, Kolkata, Mumbai, New Delhi
(GTM+5:30) Sri Jayawardenepura
(GTM+5:45) Kathmandu
(GTM+6:00) Astana
(GTM+6:00) Novosibirsk
(GTM+6:00) Dhaka

(GTM+6:30) Yangon (Rangoon)
(GTM+7:00) Krasnoyarsk
(GTM+7:00) Bangkok, Hanoi, Jakarta
(GTM+8:00) Beijing, Chongqing, Hong Kong, Urumqi
(GTM+8:00) Taipei
(GTM+8:00) Irkutsk
(GTM+8:00) Kuala Lumpur, Singapore
(GTM+8:00) Perth
(GTM+8:00) Ulaanbaatar
(GTM+9:00) Osaka, Sapporo, Tokyo
(GTM+9:00) YaKutsk
(GTM+9:00) Seoul
(GTM+9:30) Adelaide
(GTM+9:30) Darwin
(GTM+10:00) Brisbane
(GTM+10:00) Canberra, Melbourne, Sydney
(GTM+10:00) Vladivostok
(GTM+10:00) Hobart
(GTM+10:00) Guam, Port Moresby
(GTM+11:00) Magadan, Solomon Is., New Caledonia
(GTM+12:00) Petropavlovsk-Kamchatsky
(GTM+12:00) Coordinated Universal Time+12
(GTM+12:00) Fiji
(GTM+12:00) Auckland, Wellington
(GTM+13:00) Nuku'alofa

8.02. Troubleshooting

Q1. How to proceed If indicator lights are not on after starting car?

A：Please first unplug. Wait until lights are off, plug the power card and start the device. If the same problem occurs again, it means the system may not function properly. Please send the product back to the store for repair.

Q2. How to proceed if attachment clip does not adhere to windshield?

A：Make sure the windshield surface is smooth and clean without oils and dust (use volatile cleaner for cleaning).

Q3. Can the recorded video be viewed on satellite navigation system?

A：No, the recorded video cannot be viewed on satellite navigation system.

Q4. How to proceed if video picture is blurred?

A：Make sure lens is clean and use non-woven to wipe clean if necessary. If video picture is still blurred, please return it to the original store for repair.

Q5. How to proceed if other flash drive is not compatible with the device?

A：The included flash drive has been thoroughly tested and will not have compatibility issue with the device. Other flash drive due to quality inconsistency may not be compatible with the device. Please use the flash drive with well-known brands for Driving Recorder to prevent video loss or deterioration problem.

Add list table at this place!!

Q6. How to proceed if the original flash drive faults?

A：If the included flash drive faults, it can be replaced free of charge within warranty period. If the warranty is expired, please purchase the original flash drive for Driving Recorder.

Q7. Can the flash drive be replaced when the device is running?

A：Replacing or removing flash drive must be performed when the device is shut off and all lights are off.

8.03. Troubleshooting

Q1. How long video recording length does the product can take?

A：See the table below

	Dual Camera + GPS	Single Camera + GPS
4 GB flash drive	120 minutes	240 minutes
8 GB flash drive	240 minutes	480 minutes
16 GB flash drive	480 minutes	960 minutes

Note: The recording length would be influenced by the different environments. The recording length on the above table is for reference only.